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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,220	10/30/2001	Kazutaka Ando	450100-03566	3009
20999	7590	06/09/2006	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151				WORJLOH, JALATEE
ART UNIT		PAPER NUMBER		
				3621

DATE MAILED: 06/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/016,220	ANDO ET AL.	
	Examiner Jalatee Worjoh	Art Unit 3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 15 March 2006.
- 2a) This action is **FINAL**.                                   2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 26-30,33 and 36 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3,12-15,25,31,32,34,35,39 and 40 is/are rejected.
- 7) Claim(s) 4-11 and 16-24 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All   b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## **DETAILED ACTION**

1. This Office Action is responsive to the amendment filed March 15, 2006, in which claims 37 and 38 were canceled and claim 40 amended.

### *Response to Arguments*

2. Applicant's arguments filed March 15, 2006 have been fully considered but they are not persuasive.

Note. In Applicants response, it was indicated that claims 1-3,13-15,31,32,37 and 28 were rejected under 35 USC 102; however, these claims were rejected under 35 USC 103 as being unpatentable over US Patent No. 6744891 to Allen in view of 2004/0136604 to Kuwata et al.

Applicants argue that “the data of Kuwata are note degraded and the quality of that data are not improved by Kuwata. The data is merely altered to present a different visual appearance.” However, the Examiner respectfully disagrees. Kuwata et al. disclose a processing unit correcting image data according to plural predetermined evaluation criteria. Thereby, the image can be lighten or darken and also sharpen (see paragraphs [0084], [0088] and [0089]). Notice, Kuwata et al. also teach “If the luminance distribution of the object seems dark on the whole, a correction may be made to make it lighter” (see paragraph [0042]); further, correcting a dark object to make it light is a form of “improving the quality of the data”. Thus, Kuwata et al. in combination with Allen teach “quality improving means for improving the quality of data according to at least both the improvement information and the another improvement

information obtained according to a request made by the improvement-information requesting means and for outputting high-quality data" (see the rejections below).

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 40 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Specifically, claim 40 is merely claiming data stored on a medium.

Claim 39 is rejected as it depends on claim 40.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim1-3, 13-15, 31,32, 37 and 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6744891 to Allen in view of US Publication No. 2004/0136604 to Kuwata et al.

Referring to claim 1, Allen discloses reading means (i.e. customer terminal) for reading data and improvement information (i.e. key for decrypting the data and thereby reconstruct an undegraded data) used for improving the quality of the data from a recording medium which

stores the data and the improvement information (see col. 5, lines 4-19) and improvement-information requesting means (i.e. customer terminal) for requesting another improvement information used for improving the quality of the data read by the reading means (see col. 5, lines 32-35) and outputting high-quality data (see col. 5, lines 36-46). Allen does not expressly disclose quality improving means for improving the quality of the data according to at least both the improvement information and the another improvement information obtained according to a request made by the improvement-information requesting means and for outputting high-quality data. Kuwata et al. disclose quality improving means for improving the quality of the data according to at least both the improvement information and the another improvement information obtained and for outputting high-quality data (see paragraphs [0084], [0088] and [0089]; notice, Kuwata et al. teach the processing unit correcting the image data according to plural predetermined evaluation criteria. Thereby, the image can be lighten or darken and also sharpen; paragraph [0042] shows an example of improving the quality of data by different criteria (i.e. "improvement information and the another improvement information)). Thus, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus disclose by Allen to include quality improving means for improving the quality of the data according to at least both the improvement information and the another improvement information obtained according to a request made by the improvement-information requesting means and for outputting high-quality data. One of ordinary skill in the art would have been motivated to do this because it performs optimum image processing automatically based on the selected criterion (see paragraphs Kuwata [0044]& [0030]).

Referring to claims 2, 14 and 38, Allen discloses the apparatus wherein the data is degraded data obtained by degrading the original data and the quality improving means can restore the original data from the degraded data according to at least the improvement information (see col. 5, lines 4-19). Allen does not expressly disclose the quality improving means can restore the original data from the degraded data according to at least both the improvement information and the another improvement information. Kuwata et al. disclose the quality improving means can restore the original data from the degraded data according to at least both the improvement information and the another improvement information (see paragraphs [0084], [0088] and [0089]; notice, Kuwata et al. teach the processing unit correcting the image data according to plural predetermined evaluation criteria. Thereby, the image can be lighten or darken and also sharpen; paragraph [0042] shows an example of improving the quality of data by different criteria (i.e. "improvement information and the another improvement information)). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus disclose by Allen to include quality improving means for improving the quality of the data according to at least both the improvement information and the another improvement information obtained according to a request made by the improvement-information requesting means and for outputting high-quality data. One of ordinary skill in the art would have been motivated to do this because it performs optimum image processing automatically based on the selected criterion (see paragraphs Kuwata [0044]& [0030]).

Referring to claims 3 and 15, Allen discloses the quality improving means make high-quality data of which the quality is improved by  $N+1$  ( $N$  is a natural number) pieces of the

improvement information and which is output have higher quality than high-quality data of which the quality is improved by N pieces of the improvement information and which is output (see col. 5, lines 32-46).

Referring to claim 13, Allen discloses reading means (i.e. customer terminal) for reading data and improvement information (i.e. key for decrypting the data and thereby reconstruct an undegraded data) used for improving the quality of the data from a recording medium which stores the data and the improvement information (see col. 5, lines 4-19), improvement-information requesting means (i.e. customer terminal) for requesting another improvement information used for improving the quality of the data read by the reading means (see col. 5, lines 32-35), quality improving means (i.e. data digital data processor) for outputting high-quality data (see and improvement-information sending means for sending the improvement information to another information processing apparatus (see col. 5, lines 36- 46 – customer may be provided with an option to select one of a number of different quality levels... still image data could be provided at one of five different resolution levels). Allen does not expressly disclose quality improving means for improving the quality of the data according to at least both the improvement information and the another improvement information obtained according to a request made by the improvement-information requesting means. Kuwata et al. disclose quality improving means for improving the quality of the data according to at least both the improvement information and the another improvement information obtained and for outputting high-quality data (see paragraphs [0084], [0088] and [0089]; notice, Kuwata et al. teach the processing unit correcting the image data according to plural predetermined evaluation criteria. Thereby, the image can be lighten or darken and also sharpen; paragraph [0042] shows an

example of improving the quality of data by different criteria (i.e. “improvement information and the another improvement information) and paragraph [0165]). Thus, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus disclose by Allen to include quality improving means for improving the quality of the data according to at least both the improvement information and the another improvement information obtained according to a request made by the improvement-information requesting means and for outputting high-quality data. One of ordinary skill in the art would have been motivated to do this because it performs optimum image processing automatically based on the selected criterion (see paragraphs Kuwata [0044]& [0030]).

Referring to claims 31 and 34, Allen discloses reading data and improvement information (i.e. key for decrypting the data and thereby reconstruct an undegraded data) used for improving the quality of the data from a recording medium which stores the data and the improvement information (see col. 5, lines 4-19), requesting another improvement information used for improving the quality of the read data (see col. 5, lines 32-35), and improving the quality of the data according to at least the improvement information and outputting high-quality data (see col. 5, lines 36-46). Allen does not expressly disclose improving the quality of the data according to both at least the improvement information and the another improvement information. Kuwata et al. disclose improving the quality of the data according to at least both the improvement information and the another improvement information obtained and outputting high-quality data (see paragraphs [0084], [0088] and [0089]; notice, Kuwata et al. teach the processing unit correcting the image data according to plural predetermined evaluation criteria. Thereby, the image can be lighten or darken and also sharpen; paragraph [0042] shows an example of

improving the quality of data by different criteria (i.e. “improvement information and the another improvement information) and paragraph [0165]). Thus, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the method disclose by Allen to include the step of improving the quality of the data according to at least both the improvement information and the another improvement information. One of ordinary skill in the art would have been motivated to do this because it performs optimum image processing automatically based on the selected criterion (see paragraphs Kuwata [0044]& [0030]).

Referring to claims 32 and 35, Allen discloses reading data and improvement information (i.e. key for decrypting the data and thereby reconstruct an undegraded data) used for improving the quality of the data from a recording medium which stores the data and the improvement information (see col. 5, lines 4-19), requesting another improvement information used for improving the quality of the read data (see col. 5, lines 32-35), and improving the quality of the data according to at least the improvement information according to a request and outputting high-quality data and sending the improvement information to another information processing apparatus (see col. 5, lines 36-46). Allen does not expressly disclose improving the quality of the data according to both at least the improvement information and the another improvement information. Kuwata et al. disclose improving the quality of the data according to at least both the improvement information and the another improvement information obtained and outputting high-quality data (see paragraphs [0084], [0088] and [0089]; notice, Kuwata et al. teach the processing unit correcting the image data according to plural predetermined evaluation criteria. Thereby, the image can be lighten or darken and also sharpen; paragraph [0042] shows an example of improving the quality of data by different criteria (i.e. “improvement information and

the another improvement information) and paragraph [0165]). Thus, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the method disclose by Allen to include the step of improving the quality of the data according to at least both the improvement information and the another improvement information. One of ordinary skill in the art would have been motivated to do this because it performs optimum image processing automatically based on the selected criterion (see paragraphs Kuwata [0044]& [0030]).

Referring to claim 37, Allen discloses data and improvement information for improving the quality of the data and for improving the quality of another data stored in another storage medium (see claim 1 above).

6. Claims 12 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen and Kuwata et al. as applied to claim 1 above.

Allen discloses an improvement-information-request receiving means (i.e. digital data processor) for receiving an improvement-information request signal, improvement-information sending means (i.e. digital data processor) for sending the improvement information (see claim 1 above). Allen does not expressly disclose the signal indicating that another information processing apparatus request the improvement information and sending the information to the another information processing apparatus according to an improvement-information request signal received by the improvement-information-request-signal receiving means. However, Allen's receiving and sending means are connected to a plurality of user terminal (see fig. 1), which can all receive the improvement information. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus disclose

by Allen to include an improvement-information-request-signal for receiving a request signal indicating that another information processing apparatus requests the improvement information and sending the information. One of ordinary skill in the art would have been motivated to do this because provides adequate notification to the receiving means thereby preventing unauthorized individuals from receiving the data.

Referring to claim 25, Allen discloses improvement information requesting means for requesting improvement information, wherein the improvement information request include the identification information of the data, the identification information of the identification information (see claim 13 above). Allen does not expressly disclose the improvement information includes the user identification information. However, this difference is only found in the nonfunctional descriptive material and is not functionally in the step recited. The process of requesting information would be performed the same regardless of the data. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus disclose by Allen to include user identification information in the request. One of ordinary skill in the art would have been motivated to do this because of the subjective interpretation of the data does not patentably distinguish the claimed invention.

*Allowable Subject Matter*

7. Claims 4-11 and 16-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jalatee Worjloh whose telephone number is (571) 272-6714. The examiner can normally be reached on Mondays-Thursdays 8:30 - 7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-6712. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300 for Regular/After Final Actions and 571-273-6714 for Non-Official/Draft.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

*Commissioner of Patents and Trademarks*

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May 30, 2006